

**AMENDMENTS TO THE SPECIFICATION:**

*Please amend the paragraph beginning at page 2, line 5, and continuing to page 2, line 6, as follows:*

A general object of the ~~present invention~~technology disclosed herein is to enable an improved access selection mechanism in a multi-access system.

*Please amend the paragraph beginning at page 2, line 14, and continuing to page 2, line 22, as follows:*

Further objects of the ~~present invention~~technology disclosed herein are

- to enable selecting an access giving the highest bitrate in a multi-access selection
- to enable selecting a network giving the highest bitrate, in a multi-operator selection
- to enable selecting an access point giving the highest bitrate, in an uncoordinated WLAN access point network
- to enable measuring data quality without accessing a network, in a measurement tool (TEMS), to enable improved handover.

*Please delete the single sentence paragraph at page 2, line 24.*

*Please amend the paragraph beginning at page 3, line 1, and continuing to page 3, line 3, as follows:*

Briefly, the ~~tdh~~ technology disclosed herein~~present invention~~ enables a user perceived data quality estimate prior to access, which takes load or utilization into account, enabling a terminal based best user quality access selection in a multi-access multi-operator environment.

*Please amend the paragraph beginning at page 3, line 5, and continuing to page 3, line 14, as follows:*

Advantages of the technology disclosed herein~~invention~~ comprise:

- Enables estimation of data quality prior to access.
- Takes into account cell/AP load
- Enables best user quality multi-access selection without system coordination.
- Enables best user quality multi-operator selection without operator coordination
- Enables load sharing access selection based in terminal
- No impact on infrastructure
- Improved handover.

*Please amend the paragraphs beginning at page 3, line 20, and continuing to page 3, line 29, as follows:*

Fig. 1 illustrates a general multi-access system, in which the technology disclosed herein~~invention~~ can be utilized,

Fig. 2 is a schematic flow diagram of an example embodiment~~according to the invention~~,

Fig. 3 illustrates the effect of an example embodiment~~according to the invention~~,

Fig. 4 illustrates the effect of another example embodiment~~according to the invention~~,

Fig. 5 illustrates yet another an example embodiment~~according to the invention~~,

Fig. 6 illustrates still yet another an example ~~according to an embodiment of the invention~~,

Fig. 7 illustrates another example ~~according to an embodiment of the invention~~,

Fig. 8 illustrates an further example embodiment ~~of an arrangement according to the invention~~.

*Please amend the paragraphs beginning at page 4, line 23, and continuing to page 5, line 6, as follows:*

~~According to a~~ An example general embodiment, ~~the present invention~~ basically comprises estimating user perceived data quality  $Q_u$  prior to access, which takes load or utilization into account, thereby enabling a terminal based best user quality access selection in a multi-access multi-operator environment.

~~According to a~~ Another example general embodiment, ~~the invention~~ comprises determining the radio quality for a plurality of available accesses, determining a load or utilization factor for each of the accesses, estimating a user perceived quality based on the determined quality and load, and finally selecting at least one access which gives the best user perceived quality, thereby providing an improved access selection.

One example embodiment of a method, ~~according to the invention,~~ will be described with reference to Fig. 2, which illustrates a schematic flow diagram of an embodiment of a method for improved access selection.

*Please amend the paragraph beginning at page 5, line 24, and continuing to page 5, line 26, as follows:*

The terminal can estimate  $\mu$  prior to an access as the expected coding and modulation rate. The value of  $\mu$  can be specific for each terminal, or optionally constant or the same for each terminal and depend on the signal strength from the various accesses.

*Please amend the paragraph beginning at page 6, line 5, and continuing to page 6, line 9, as follows:*

Also, according to ~~the invention~~ an example embodiment, the server utilization factor  $\rho$  or load can be measured by the terminal as the fraction of activation on the carrier frequency (mainly for WLAN, but also for downlink Wideband Code Division Multiple Access (WCDMA) and CDMA2000). The utilization factor can also be explicitly signaled from the access point.

*On page 6, line 15, please move the centered line number "15" from the center of the page to the left margin.*

*On page 6, line 20, please move the centered line number "20" from the center of the page to the left margin, so that the denominator of Eq. 3 is not obscured and simply reads " $SS_{tot}$ ".*

*Please amend the paragraph beginning at page 7, line 12, and continuing to page 7, line 21, as follows:*

There is a clear correlation between the user perceived data quality and carrier frequency load. According to an example embodiment of the present invention, the user perceived data quality  $Q_u$  can be estimated according to:

$$Q_u = \mu \cdot (1 - \rho) \quad \text{Eq.4}$$

where  $\mu$  is the radio link bitrate [kbps],  $\rho$  is the utilization factor ( $0 < \rho < 1$ ). In Fig. 3, where the user perceived data quality is represented by the CSE-bitrate; the absolute utilization or  $\rho \cdot \text{system capacity}$  is the x-axis,  $E[CSE]$  is the y-axis and  $\mu$  is the intersection of the y-axis of the indicated dashed line.

*Please amend the paragraphs beginning at page 8, line 28, and continuing to page 9, line 5, as follows:*

An example of an example embodiment of the present invention will be described below, with reference to Fig. 5.

Consider a terminal 10 according to the invention an example embodiment, such as a mobile unit, that encounters the situation where it has to select one of a WLAN-network 20 and a WCDMA HS-network 20. Initially, the terminal 10 measures the radio signal strength or radio signal quality for WLAN and WCDMA, respectively. Consequently, it is possible to estimate  $\mu$  for the two systems 20.

*Please amend the paragraph beginning at page 9, line 25, and continuing to page 9, line 31, as follows:*

Figure 8 shows an example embodiment of a mobile communication terminal 10 according to the invention. The terminal 10 comprises an input/output unit 11, a unit 12 for determining the radio quality for a plurality of accesses, a unit 13 for determining the load or utilization factor of at least one access point for each of the plurality of accesses, a unit 14 for determining a user perceived data quality based on the determined radio quality and utilization, and selecting unit 15 for selecting at least one access based on the determined user perceived data quality. [[.]]

*Please amend the paragraph beginning at page 10, line 21, and continuing to page 10, line 24, as follows:*

It is understood that the technology disclosed herein~~invention~~ is equally applicable to access selection for cases where the accesses i) belong to the same operator or different operators, ii) belong to the same or different radio access technologies, and iii) belong to the same or different access networks.